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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,351	10/16/2001	Yoshinobu Ikeda	NIT-307	3978

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EXAMINER

HO, THOMAS M

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/977,351

Applicant(s)

IKEDA, YOSHINOBU

Examiner

Thomas M. Ho

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 10/16/01.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/15/2002.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-35 are pending.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 26, 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, applicant recites “an access control device for controlling access of said second information processing device with said first information processing device.”

Access of an entity A with entity B can either mean that A is granted access to B, or B is granted access to A. Claim one is indefinite and can lend itself to either interpretation. This distinction is also quite significant as readily understood by those in the art, and should be clarified.

Similarly in claim 2, Applicant recites the limitation “access requests from said second information processing device.” Such a phrase can be construed as either the second device

requesting information to another device, or the referral of the access of information of data stored on the second device.

However, applicant clarifies the intention by stating that it is the second, information processing device that requests information from the first processing device. No rejection is given on claim 2. Nevertheless, the clarification of the wording is encouraged by the Examiner.

For purposes of Examination, and in light of the specification and interpretation of other claims, the Examiner shall interpret claim 1 as meaning, the second information processing device requests data from the first processing device.

In reference to claims 26, 35, the term “affiliated with the majority” is indefinite. The term “majority” does not provide adequate specification as to what set of entities it applies to.

Furthermore, the term “affiliated” in the context of computer science is ambiguous. Does the applicant mean that the first rewrite information is different from the majority? Can the rewrite information be different from the majority, and still be affiliated? A mere affiliation of information is indefinite, as any information within a computer similar or dissimilar, can be said to be affiliated.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 6-13, 15-17, 19-20, 23-25, 27-29, 32-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Shapiro, US patent 5991810.

In reference to claim 1:

Shapiro et al. (Column 2, lines 5-35) & (Figure 1) discloses an access control system comprising:

- A first information processing device connected to a first network for holding information, at least one second information processing device connected to a second network, where the first information processing device is the webserver that holds a particular website.
- An access control device for controlling access of said second information processing device with said first information processing device, wherein said second information processing device possess a copy of said information, where the second information processing device is the proxy server, where the proxy server requests the website from the original server and stores a cached copy.

- Among access requests to said first information processing device from said second network, said access control device grants only access requests from said second information processing device, where the first device or server on the internet grants only access to the proxy cache server rather than the individual computers on the intranet since all traffic is routed through the proxy. (Figure 1)

In reference to claim 2:

Shapiro et al. (Column 2, lines 5-35) & (Figure 1) discloses an access control system according to claim 1, wherein access requests from said second information processing device are transmit requests for information possessed by said first information processing device, where the access requests are requests made by the proxy cache server for the websites stored on their original host servers.

In reference to claim 3:

Shapiro (Column 2, lines 5-35) & (Figure 1) discloses an access control system according to claim 2, wherein said second network connects with a third information processing device for requesting access to information possessed by the first information processing device; and wherein when access to information requested of said third information processing device is not possessed by said second information processing device, said second information processing device issues said transmit request to said first information processing device, where the third information processing device is a gateway client, which requests information from the first

device, the website server, and when information is not contained by the second information device, the proxy cache server requests the information from the first device.

In reference to claim 6:

Shapiro (Column 2, lines 5-35) & (Figure 1) discloses an access control system according to claim 1, wherein said second network is further connected to a load dispersing device;

Wherein when an access request is issued to said first information processing device from said third information processing device, said load dispersing allows access to one of said second information processing devices in response to said access request, where a proxy cache by definition is a load dispersing device, and where the access request is issued from the client (the third device), the proxy cache allows access to the information therein in response to it.

In reference to claim 7:

Shapiro (Column 2, lines 5-35) & (Figure 1) discloses an access control system according to claim 6, wherein said load dispersing device is a domain name server; wherein when an access request was made to said first information processing device, said load dispersing device sends one IP address of said second information processing device back to said third information processing device, where a domain name server or DNS server is understood in the art to be a server in which a request for a particular website by name can be mapped out in a table for its real numerical IP address, and where Shapiro discloses such functionality. (Column 5, lines 28-35)

In reference to claim 8:

Shapiro (Column 2, lines 5-35) & (Figure 1) discloses an access control system according to claim 1, wherein said first network is a local area network, and said second network is Internet, where the local area network is the intranet, and the second network is the Internet, and all the computers are connected with one another as depicted in figure 1.

In reference to claim 9:

Shapiro (Column 2, lines 5-35) & (Figure 1) discloses an access control system according to claim 1, wherein said first information processing device is a WWW server; and

Wherein said access control device approves the access request when the access request from said second information processing device is an HTTP protocol.

Claim 10 is substantially similar to the elements of claim 1 and is rejected for the same reasons.

Claims 11, 17, 20, 25, 27, 29, 34 are substantially similar to the elements of claim 9 and is rejected for the same reasons.

Claims 12 and 13 are substantially similar to the elements of the invention as set forth by claim 2 and are rejected for the same reasons.

Claims 16, 19, 23, 28, 32 are substantially similar to claim 5 and is rejected for the same reasons.

Claims 24, 33 are rejected for the same reasons as claim 8.

Claim 15 is discloses hardware elements that implement a method or functionality substantially similar to the elements of claim 1 and is rejected for the same reasons.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4,5, 14, 18, 21, 22, 30, 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shapiro, US patent 5991810 and Krishnamurthy et al., US patent 6578113.

In reference to claim 4:

Shapiro fails to explicitly discloses an access control system according to claim 2, wherein said second information processing device acquires information relating to changes in information held by the first information processing device and issues said transmit request when changes to said information have been made.

Shapiro does disclose that the cache may be refreshed when the HTTP request or web page has a more recent version. (Column 6, lines 5-12) As previously stated, the second information

Art Unit: 2134

processing device is held to be the proxy cache, the first information processing device is held to be the website server.

Krishnamurthy et al. (Figures 2 & 3) discloses a method wherein said second information processing device acquires information relating to changes in information held by the first information processing device and issues said transmit request when changes to said information have been made, where the transmit request is made (Figure 3, Items 305, 306, 307) when the cached data is currently held to be invalid. (Figure 2).

Krishnamurthy et al. (Column 2, lines 43-45) teaches that it would be beneficial to provide stronger cache coherency.

Similarly, Shapiro (Column 6, lines 5-12) teaches changing the expired website data helps to ensure that the most current webpage data is stored in the block [cache] and that the block is not cluttered with infrequently accessed data.

It would have been obvious to one of ordinary skill in the art at the time of invention to apply the cache updating/validation mechanism of Krishnamurthy et al. as the updating mechanism of Shapiro in order to achieve the benefit of cache coherency and to ensure the most current web page data is stored in the block.

In reference to claim 5:

Krishnamurthy et al. (Figures 2 & 3) discloses an access control system according to claim 4, wherein information relating to changes in information held by said first information processing device is a first check code relating to said information and said second information processing device calculates a second check code for a copy of information on said second information processing device, and compares said first check code with said second check code and determines whether or not changes were made in information held in said first information processing device, where the information relating to the changes in information held by both the first and second information processing devices is a check code of validity or freshness. (Figure 2) & (Column 2, lines 22-42)

In reference to claim 14:

Shapiro and Krishnamurthy et al. as previously combined, discloses an access control device according to claim 12, wherein said access request sent by said control unit is a transmit request for a check code for information held by said first information processing device, where the check code is the code for validity or freshness regarding the website information, the transmit request is the reading of the validity data. Krishnamurthy et al. (Column 4, lines 22-42) & (Figures 2 & 3)

In reference to claim 18:

Shapiro and Krishnamurthy et al. as previously combined, discloses a second information processing device for communicating with a first information processing device connecting to a

Art Unit: 2134

first information processing device connecting to a first network by way of an access control device for controlling connections with said first network and a second network and said second information processing device comprising:

- A memory section having an information copy held in said first information processing device. Shapiro (Figure 1, "Website Storage") & (Figure 1, other memory elements)
- A receiving unit to acquire a first rewrite information relating to original information of said information copy from said first information processing device. Shapiro (Column 6, lines 5-12) & (Figure 1, "network adaptors") & Krishnamurthy et al. (Figure 3)
- A control unit for making a second rewrite information relating to said information copy and for comparing it with acquired rewrite information of said original information, where the control unit compares the validity to see if the information copy is still valid. Krishnamurthy et al. (Figures 2& 3)
- A transmit unit for issuing a transmit request of said original information when said first and second rewrite information are different, where the transmit unit transmits a request for the original information when the information is denoted as invalid, indicating the information is different. (Figure 3, Item 303)

Claims 30, 31, 21 and 22 are substantially similar to the elements of claim 18 and are rejected for the same reasons.

Conclusion

7. The following art not relied upon us made of record:

- US patent 6438652 Jordan et al. discloses a method of load balancing cooperating cache servers which are updated by a forwarded request.
- US patent 5586260 Hu, discloses a method of authenticating a client through a gateway.
- US patent 5924116 discloses a method of using a tree of caches which may defer to one another.
- US patent 5913025 discloses a method of proxy authentication.

8. Any inquiry concerning this communication from the examiner should be directed to Thomas M Ho whose telephone number is (571)272-3835. The examiner can normally be reached on M-F from 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A. Morse can be reached on (571)272-3838.

The Examiner may also be reached through email through Thomas.Ho6@uspto.gov

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-2100.

General Information/Receptionist	Telephone: 571-272-2100	Fax: 703-872-9306
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Application/Control Number: 09/977,351


Page 13

Art Unit: 2134

TMH

June 22, 2005.

David Y. Jung
Primary Examiner



6/25/05